approving crowds repeated, and still repeat, "put the poor man's cottage in order." That it needs to be put in order all admit. What Sir Henry Bunbury said in his recent report to the Labourers' Improvement Society of one county will apply to the others:—"Under the head of *cottages* the reports are in general painful. In a few parishes, where opulent landowners are resident, the cottages are represented to be good. But, speaking of the great majority, it appears that there are few parishes in which the cottages are even sufficient in number; and generally they are stated to be small, crowded, in bad repair, ill drained, and unfit for the decent accommodation of the families which inhabit them. Those which are the property of landowners appear to be the best; but almost everywhere, speculators have acquired small patches of land on which they have built what our ancestors called 'silly cottages,' with little or nothing in the shape of a garden attached to them; and these they let at rents which are ruinous to the labourers."

And then again,—"the reports on cottages exhibit generally the melancholy picture of a population ill-lodged, exposed to influences which engender diseases, and crowded to a degree which is not only likely to produce filthy habits, but gross indecency and vice. But this unhappily is a branch of our inquiries on which we are nearly powerless. All that we can do is to endeavour to open the eyes of landowners as to the insufficiency of the dwellings intended for the labourers on their estates, and the evil effects, both physical and moral, which result from the want of decent and wholesome accommodation. At the same time we may draw attention to the injurious consequences which spring from speculation in cottage building. The heavy rents exacted by these griping speculators contribute largely to depress the condition of the labourers, who are left without an option, if the owners of estates neglect to provide sufficient dwellings for the families of those by whom their estates are to be cultivated."

All that he said has been known long and long ago, through sanatary reports, which present an account of distress, disease, and demoralization, resulting from inattention to the dwellings of the poor, that cannot be contemplated without horror; but the wealthier part of society were not then so alive to its importance as they are now, and therefore it excited less attention. A kindlier feeling than was formerly exhibited towards the poor is springing up in the hearts of their superiors, and all classes will unquestionably benefit by the exercise of it.

Feeling and saying, however, are not enough, there must be *doing*, efficient doing; and it is to be hoped that the willingness which exists, and the large sums of money that in various shapes have been subscribed, will be applied in the best manner.

The importance of providing healthful and well-arranged dwellings can hardly be overestimated. As the writer observed some years ago, when urging the same point:—"Order will not engender disorder, nor disorder, order: but its like; and the man who passes his time amidst inconvenient and tasteless arrangements, exposed to continual discomforts, and utterly unable to maintain an appearance of respectability, will gradually lose any desire to do so which he formerly felt, and find the external disorder result in a moral disorganization, lamentable in its consequences, if not fatal. 'Slaves, through slavery, lose even the desire to be free:' so men, becoming accustomed to badly-constructed, inconvenient, and ill-arranged habitations, lose their perception of excellence and goodness; and are lowered, not merely in their physical state, but mentally. Watch the progress of many a respectable and industrious young couple, placed in one of the miserable hovels still dignified with the title of a labourer's residence in some parts of the kingdom—damp, ill-drained, ill-ventilated, pervious to the rain, and void of every thing which could make home happy. For a time, strenuous efforts are used to remedy the evils; but, as they are gradually found to be unconquerable, the wife, abandoning the task, becomes inevitably a slattern herself; habits even of decency are disregarded by the children; and the husband, finding no enjoyment in his own house, seeks it in the beershop, and becomes a drunkard and a desperado. On the other hand—a tidy, well-arranged dwelling leads to observances of better manners and feelings of self-respect, induces neatness and industry, and elevates in time the character of all its occupants."

In all cases perfect ventilation is of the first importance. The deadly effects of breathing an impure medium would seem to be too generally admitted to require observation, and one would expect to find in all new dwellings the best arrangements for obtaining a free current of pure air. Unfortunately, ignorance and cupidity still operate to prevent this. At Liverpool lately, the writer observed with regret in one district more than a dozen narrow courts in progress, *closed at one end*, and lined with ill-ventilated houses; and took occasion publicly to point out the evils of such an arrangement in the strongest language he could command. The policy which prompts it is as short-sighted as it is unchristianlike. A fever, when generated, is no respecter of persons; and the landowner far removed from the immediate seat of contagion, might none the less surely fall one of its victims. The injurious effects of closed courts have been proved by numerous competent parties, and the new Buildings Act very properly forbids the erection of such within its limits. How distressing it is, then, to find that the first houses built by the "Society for Improving the Condition of the Labouring Classes," model-houses to be recommended for adoption, are actually made to form a court closed at one end, and less than 23 feet wide!* It is difficult to guess what could have led the committee into this unfortunate mistake, which is a practical contradiction of what many of its members have often urged, and will probably prevent for several years to come, the abandonment of this most defective and injurious mode of laying out ground in localities not within the control of the Act. It is seriously to be desired that the committee may be induced to modify their present plan, and so avoid the reproach which the consummation of it would unquestionably bring to them.

At the present moment houses for the lower classes are especially needed in the metropolis. The recent formation of new streets has driven out hundreds of poor families without furnishing another place of retreat; and, by the operation of the Buildings Act, still greater numbers of persons will be ejected next year from kitchens and cellars (damp, unwholesome holes) not constructed in accordance with its provisions. Now is the time, therefore, to provide them with well ventilated, substantial, and healthful dwellings; and to teach them the importance of cleanliness, and the value of order.

ELECTION OF SURVEYOR TO THE HORNSEY DISTRICT IN THE ROOM OF THE LATE ALFRED BARTHOLOMEW, ESQ.

(*January 30th*, 1845.)

	No. of Votes.
Elected—Rawlinson Parkinson	41
Henry John Hammon	30
Thomas Bird	23
Witherden Young	5
James Harrison	1
William Frederick East	0

PURCHASE OF THE FLEET PRISON.—A report from the City Lands Committee on the subject of the reference made to them to open a communication with the Commissioners of Woods and Forests to ascertain upon what terms the Fleet Prison could be purchased, has recently been presented to the Court of Common Council. The report states that the committee had offered 23,000*l.*, but that the Commissioners of Woods and Forests had declined to accept less than 25,000*l.*, the sum at which the property had been valued by three eminent surveyors. The commissioners had given the corporation an option of making the purchase at that sum until the 28th ultimo, and the committee, by their report, unanimously recommended that the purchase should be effected. Mr. Dixon, in moving the Court to agree with the committee in their report, bore testimony to the courteous manner in which the deputation had been received by the Earl of Lincoln, who came to town expressly to meet them. The motion was agreed to.

* In the Hagnigge Walls-road, as already pointed out in this journal. See p. 1 of present volume.

CHIMNEY-SHAFT AT THAMES BANK.—EXPANSION OF BRICKWORK BY HEAT.

EVERY school-boy knows that heat expands bodies. A rod of metal made to fit an opening when cold, will not enter the opening if it be heated; and a glass vessel cracks if hot water be poured into it, because, as all are aware, the portion in contact with the heated fluid is expanded, while the other parts remain at rest. This property of heat was made available years ago in forcing upright the walls of a gallery which leaned outwards at the top. Bars of metal were passed across the gallery through the two walls, and were secured outside by a plate screwed on to each end of the bar tightly against the wall. The bars were then heated, and, being expanded by the operation, protruded slightly through the walls, and allowed of the plates being screwed farther on, the effect of which of course was that when the bars, being cooled, collapsed, the walls were drawn together, and by repetitions of the operation were ultimately made perfectly upright. The force exerted is immense.

All this we say is well known, and opportunities occur every day to observe the effect of heat on such substances as are here alluded to. Some bodies, however, expand much less than others, and the effect can seldom be observed, and *alumina*, or argillaceous earth, is an exception to the general rule, and *contracts* when heated. Brickwork it would seem is nevertheless expanded by heat, and it is to an instance where the expansion is to be seen and can be measured, that we direct the attention of our readers.

At Mr. Thomas Cubitt's fine establishment at Thames Bank, mentioned in the last number of our journal, the chimney-shaft for the steam-engine is constructed in a peculiar manner. The chimney, which is circular, 5 feet in clear diameter all the way up, and 105 feet high, is built of very thin brickwork; that is to say, it is 14 inches thick at the bottom, and 6 inches at the top, the bricks having been moulded for the purpose; and it stands in the centre of a tower, 17 feet square on the outside, formed of 14 inch walls all the way up with hoop-iron bond in the centre of the walls at certain intervals. The first tier of this bond is 15 feet from the ground; the other tiers are put closer together as they approach the top. Around the shaft, but in no case touching it, are stone steps leading to the top with landings at certain intervals.

The chief reason for adopting this mode of construction was, to obtain a more striking object for appearance' sake than a chimney-shaft, and Mr. Cubitt is of opinion that its ultimate cost will be less than that of the latter: it economises the fuel to a considerable extent, and, moreover, the shaft must have been formed much more expensively if there had been no tower around it.

Now this shaft, standing independent of the surrounding building with the means of access to it at any part, afforded the most perfect facilities for ascertaining the effect of heat upon this height of brickwork, and an index having been set up on the topmost landing under cover, which is 80 feet from the ground, it is found that this length of shaft becomes ⅜ths of an inch longer when the fire is lighted than it is when cold. The construction of this shaft offers facilities for several other interesting and important inquiries, which will doubtless be pursued by the excellent and able owner of it.

FALL OF A HOUSE IN WESTMINSTER.—On the 16th of last month, a house at the corner of Old Pye-street, Westminster, fell down, but fortunately without injuring any person. The occurrence having excited much comment, we thought it our duty to inquire into the occurrence. It seems that Mr. Howell, the district surveyor, having received intimation that the building was in a dangerous state, repaired to the spot, and finding that it was so, gave orders that it should be shored up, and then dispatched information to the official referees. Before anything could be done, however, the house fell. It seems that Mr. Howell had overstepped his duty in ordering it to be shored up, but if he had not done so, lives might have been sacrificed.

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